

In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Currently amended) A method for implementing two-way communication between at least first and second devices, comprising steps of:

(a1) during finite time periods following transmission of respective first messages from the first device to the second device, using the first device to listen for second messages transmitted from the second device to the first device; and

(a2) after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, ceasing to use the first device to listen for second messages transmitted from the second device to the first device until after the first device transmits another first message to the second device; and

(a3) ceasing to use the second device to listen for first messages received from the first device at least occasionally when the second device is operational.

2. (Currently amended) The method of claim 1, wherein the first and second devices communicate via a wireless communication link, and wherein:

the step (a1) comprises a step of, during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device; and

the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering down the receiver included in the first device.

3. (Currently amended) The method of claim 1, wherein the first and second devices communicate via a wireless communication link, and wherein:

the step (a1) comprises a step of, during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device; and

the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off down the receiver included in the first device until after the first device transmits another first message to the second device.

4. (Original) The method of claim 1, further comprising steps of:

(b) receiving a sensor input with the first device; and

(c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device.

5. (Original) The method of claim 4, wherein:

the step (b) comprises a step of receiving the sensor input from an accelerometer supported by a person in locomotion on foot; and

the step (c) comprises a step of generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

6. (Original) The method of claim 5, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

7. (Original) The method of claim 5, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

8. (Original) The method of claim 4, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

9. (Original) The method of claim 4, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

10. (Original) The method of claim 1, further comprising steps of:

(b1) during finite time periods following transmission of respective third messages from a third device to the second device, using the third device to listen for second messages transmitted from the second device to the third device; and

(b2) after each of the finite time periods following the transmission of the respective third messages from the third device to the second device, ceasing to use the third device to listen for second messages transmitted from the second device to the third device until after the first device transmits another first message to the second device.

11. (Currently amended) The method of claim 10, wherein the second device communicates with each of the first and third devices via at least one wireless communication link, and wherein:

the step (a1) comprises a step of, during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device;

the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off down the receiver included in the first device;

the step (b1) comprises a step of, during the finite time periods following the transmission of the respective third messages from the third device to the second device, powering on a receiver of the wireless communication link which is included in the third device; and

the step (b2) comprises a step of, after each of the finite time periods following the transmission of the respective third messages from the third device to the second device, powering off down the receiver included in the third device.

12. (Currently amended) The method of claim 10, wherein the second device communicates with each of the first and third devices via at least one wireless communication link, and wherein:

the step (a1) comprises a step of, during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device;

the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off down the receiver included in the first device until after the first device transmits another first message to the second device;

the step (b1) comprises a step of, during the finite time periods following the transmission of the respective third messages from the third device to the second device, powering on a receiver of the wireless communication link which is included in the third device; and

the step (b2) comprises a step of, after each of the finite time periods following the transmission of the respective third messages from the third device to the second device, powering off down the receiver included in the third device until after the third device transmits another third message to the second device.

13. (Currently amended) A method for implementing two-way communication between at least first and second devices, comprising steps of:

(a1) during finite time periods following reception by the second device of respective first messages from the first device, using the second device to transmit second messages to the first device; and

(a2) after each of the finite time periods following reception by the second device of respective first messages from the first device, ceasing to use the second device to transmit second messages to the first device until after the second device receives another first message from the first device; and

(a3) ceasing to use the second device to listen for first messages received from the first device at least occasionally when the second device is operational.

14. (Currently amended) The method of claim 13, wherein the first and second devices communicate via a wireless communication link, and wherein:

the step (a1) comprises a step of, during finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first device, powering on a transmitter of the wireless communication link, which is included in the second device, to enable the second device to transmit the second messages to the first device; and

the step (a2) comprises a step of, after transmission of each of the second messages from the second device to the first device, powering off down the transmitter included in the second device.

15. (Currently amended) The method of claim 13, wherein the first and second devices communicate via a wireless communication link, and wherein:

the step (a1) comprises a step of, during finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first device, powering on a transmitter of the wireless communication link, which is included in the second device, to enable the second device to transmit the second messages to the first device; and

the step (a2) comprises a step of, after transmission of each of the second messages from the second device to the first device, powering off down the transmitter included in the second device until after the second device receives another first message from the first device.

16. (Original) The method of claim 13, further comprising steps of:

(b) receiving a sensor input with the first device; and

(c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device.

17. (Original) The method of claim 16, wherein:

the step (b) comprises a step of receiving the sensor input from an accelerometer supported by a person in locomotion on foot; and

the step (c) comprises a step of generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

18. (Original) The method of claim 17, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

19. (Original) The method of claim 17, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

20. (Original) The method of claim 16, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

21. (Original) The method of claim 16, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

22. (Original) The method of claim 13, further comprising steps of:

(b1) during finite time periods following reception by the second device of respective third messages from a third device, using the second device to transmit second messages to the third device; and

(b2) after each of the finite time periods following reception by the second device of respective third messages from the third device, ceasing to use the second device to transmit second messages to the third device until after the second device receives another third message from the third device.

23. (Currently amended) The method of claim 22, wherein the second device communicates with each of the first and third devices via at least one wireless communication link, and wherein:

the step (a1) comprises a step of, during finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first device, powering on a transmitter of the at least one wireless communication link, which is included in the second device, to enable the second device to transmit the second messages to the first device;

the step (a2) comprises a step of, after transmission of each of the second messages from the second device to the first device, powering off down the transmitter included in the second device;

the step (b1) comprises a step of, during finite time periods following reception by the second device of respective third messages from the third device, when the second device needs to communicate with the third device, powering on a transmitter of the at least one wireless communication link, which is included in the second device, to enable the second device to transmit the second messages to the third device; and

the step (b2) comprises a step of, after transmission of each of the second messages from the second device to the third device, powering off down the transmitter included in the second device.

24. (Currently amended) A first device system including at least first and second devices capable of engaging in two-way communication with at least a second device, comprising:

a first device comprising:

a first transmitter;

a first receiver; and

at least one first controller coupled to the first transmitter and the first receiver, the at least one first controller being configured to power on the first receiver to listen for second messages from the second device during finite time periods following use of the first transmitter to transmit respective first messages to the second device, and being further configured to power

down the first receiver after each of the finite time periods following use of the first transmitter to transmit respective first messages to the second device; and

a second device comprising:

a second transmitter;

a second receiver; and

at least one second controller coupled to the second transmitter and the second receiver, the at least one second controller being configured to power down the second receiver at least occasionally during operation of the second device.

25. (Currently amended) The first device system of claim 24, wherein the at least one first controller is further configured to, after each of the finite time periods following use of the first transmitter to transmit respective first messages to the second device, power down the first receiver until after the first transmitter is used to transmit another first message to the second device.

26. (Currently amended) The device system of claim 24, wherein the at least one first controller is further configured to selectively use the first transmitter to transmit first messages to the second device.

27. (Currently amended) The device system of claim 24, wherein the first transmitter and the first receiver are both included in a first transceiver, and the second transmitter and the second receiver are both included in a second transceiver.

28. (Currently amended) A second device system capable of engaging in two-way communication with at least a first device, comprising:

a first device comprising:

as first transmitter;

a first receiver; and

at least one first controller coupled to the first transmitter and the first receiver;

and

a second device comprising:

a second transmitter;
a second receiver; and
at least one second controller coupled to the second transmitter and the second receiver, the at least one second controller being configured to power on the second transmitter to transmit second messages to the first device during finite time periods following reception by the second receiver of respective first messages from the first device, and being further configured to power down the transmitter such that, after transmission of each of the second messages from the second device to the first device, the second transmitter is after transmission of each of the second messages from the second device to the first device powered down and is not thereafter used to transmit any additional messages to the first device until after the second receiver receives another first message from the first device.

29. (Cancelled)

30. (Currently amended) The device system of claim 29, wherein the first transmitter and the first receiver are both included in a first transceiver, and the second transmitter and the second receiver are both included in a second transceiver.

31. (Currently amended) A first device system capable of engaging in two-way communication with at least a second device, comprising:

means for using the a first device to listen for second messages transmitted from the a second device to the first device during finite time periods following transmission of respective first messages from the first device to the second device; and

means for, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, ceasing to use first device to listen for second messages transmitted from the second device to the first device until after the first device transmits another first message to the second device; and

means for ceasing to use the second device to listen for messages transmitted from the first device to the second device at least occasionally during operation of the second device.

32. (Currently amended) A ~~system second device capable of engaging in two-way communication with at least a first device~~, comprising:

means for using ~~the~~ ~~a~~ second device to transmit second messages to ~~the~~ ~~a~~ first device during finite time periods following reception by the second device of respective first messages from the first device; and

means for, after each of the finite time periods following reception by the second device of respective first messages from the first device, ceasing to use the second device to transmit second messages to the first device until after the second device receives another first message from the first device; and

means for ceasing to use the second device to listen for messages transmitted from the first device to the second device at least occasionally during operation of the second device.

33. (Currently amended) A method for implementing two-way communication between at least first and second devices, comprising steps of:

(a1) during finite time periods following transmission of respective first messages from the first device to the second device, powering on a receiver included in the first device to listen for second messages transmitted from the second device to first device; and

(a2) after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering ~~off~~ down the receiver included in the first device; and

(a3) powering down a receiver included in the second device at least occasionally when the second device is operational.

34. (Currently amended) The method of claim 33, wherein the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering ~~off~~ down the receiver included in the first device until after the first device transmits another first message to the second device.

35. (Original) The method of claim 33, further comprising steps of:

(b) receiving a sensor input with the first device; and

(c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device.

36. (Original) The method of claim 35, wherein:

the step (b) comprises a step of receiving the sensor input from an accelerometer supported by a person in locomotion on foot; and

the step (c) comprises a step of generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

37. (Original) The method of claim 36, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

38. (Original) The method of claim 36, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

39. (Original) The method of claim 35, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

40. (Original) The method of claim 35, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

41. (Currently amended) A method for implementing two-way communication between at least first and second devices, comprising steps of:

(a1) during finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first

device, powering on a transmitter included in the second device to transmit second messages to the first device; and

(a2) after transmission of each of the second messages from the second device to the first device, powering off down the transmitter included in the second device, and thereafter ceasing to use the second device to transmit any additional messages to the first device until after the second device receives another first message from the first device.

42. (Canceled)

43. (Original) The method of claim 41, further comprising steps of:

(b) receiving a sensor input with the first device; and
(c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device.

44. (Original) The method of claim 43, wherein:

the step (b) comprises a step of receiving the sensor input from an accelerometer supported by a person in locomotion on foot; and

the step (c) comprises a step of generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

45. (Original) The method of claim 44, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

46. (Original) The method of claim 44, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

47. (Original) The method of claim 43, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

48. (Original) The method of claim 43, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

49. (Currently amended) A ~~system~~ ~~first device capable of engaging in two-way communication with at least a second device~~, comprising:

means for powering on a receiver included ~~the~~ ~~a~~ first device to listen for second messages transmitted from ~~the~~ ~~a~~ second device to first device during finite time periods following transmission of respective first messages from the first device to the second device; and

means for, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off down the receiver included in the first device; and

means for powering down a receiver included in the second device at least occasionally when the second device is operational.

50. (Currently amended) A ~~system~~ ~~second device capable of engaging in two-way communication with at least a first device~~, comprising:

means for, when ~~the~~ ~~a~~ second device needs to communicate with ~~the~~ ~~a~~ first device, powering on a transmitter included in the second device to transmit second messages to the first device during finite time periods following reception by the second device of respective first messages from the first device; and

means for, after transmission of each of the second messages from the second device to the first device, powering off down the transmitter included in the second device, and thereafter ceasing to use the second device to transmit any additional messages to the first device until after the second device receives another first message from the first device.

51. (New) The method of claim 1, wherein the first and second devices communicate via a wireless communication link, and wherein:

the step (a3) comprises a step of powering down a receiver of the wireless communication link which is included in the second device at least occasionally when the second device is operational.

52. (New) The method of claim 1, wherein the step (a3) comprises ceasing to use the second device to listen for first messages from the first device during at least some time periods during which the second device does not expect to receive first messages from the first device.

53 (New) The method of claim 52, wherein the time periods during which the second device does not expect receive first messages from the first device are identified based upon information included in at least some of the first messages communicated from the first device to the second device, which information indicates when the first device expects to send at least one subsequent first message to the second device.

54. (New) The method of claim 52, wherein at least some of the second messages communicated from the second device to the first device include information identifying the time periods during which the second device expects to receive first messages from the first device; and wherein the method further comprises a step of:

transmitting at least some of the first messages from the first device to the second device during the identified time periods during which the second device expects to receive first messages from the first device.

55. (New) The method of claim 1, wherein both the first and second devices are battery operated and ambulatory, and wherein the method further comprises a step of:

performing the steps (a1) – (a3) while both the first and second device are carried by a person.

56. (New) The method of claim 13, wherein the first and second devices communicate via a wireless communication link, and wherein:

the step (a3) comprises a step of powering down a receiver of the wireless communication link which is included in the second device at least occasionally when the second device is operational.

57. (New) The method of claim 13, wherein the step (a3) comprises ceasing to use the second device to listen for first messages from the first device during at least some time periods during which the second device does not expect to receive first messages from the first device.

58 (New) The method of claim 57, wherein the time periods during which the second device does not expect receive first messages from the first device are identified based upon information included in at least some of the first messages communicated from the first device to the second device, which information indicates when the first device expects to send at least one subsequent first message to the second device.

59. (New) The method of claim 57, wherein at least some of the second messages communicated from the second device to the first device include information identifying the time periods during which the second device expects to receive first messages from the first device; and wherein the method further comprises a step of:

transmitting at least some of the first messages from the first device to the second device during the identified time periods during which the second device expects to receive first messages from the first device.

60. (New) The method of claim 13, wherein both the first and second devices are battery operated and ambulatory, and wherein the method further comprises a step of:

performing the steps (a1) – (a3) while both the first and second device are carried by a person.

61. (New) The system of claim 24, wherein the at least one second controller is configured to power down the second receiver during at least some time periods that are identified based upon information included in at least some of the first messages communicated

from the first device to the second device, which information indicates when the first device expects to send at least one subsequent first message to the second device.

62. (New) The system of claim 24, wherein:

the at least one second controller is configured such that at least some of the second messages communicated from the second device to the first device include information identifying time periods during which the second device expects to receive first messages from the first device, and is further configured to power down the second receiver during at least some time periods during which the second device does not expect to receive first messages from the first device; and

wherein the at least one first controller is configured to cause the first transmitter to transmit at least some of the first messages from the first device to the second device during the identified time periods during which the second device expects to receive first messages from the first device.

63. (New) The system of claim 24, wherein both the first and second devices are battery operated and configured to be carried by a person when the system is operational.

64. (New) The system of claim 28, wherein the at least one second controller is further configured to power down the second receiver at least occasionally during operation of the second device.

65. (New) The system of claim 64, wherein the at least one second controller is configured to power down the second receiver during at least some time periods that are identified based upon information included in at least some of the first messages communicated from the first device to the second device, which information indicates when the first device expects to send at least one subsequent first message to the second device.

66. (New) The system of claim 64, wherein:

the at least one second controller is configured such that at least some of the second messages communicated from the second device to the first device include information

identifying time periods during which the second device expects to receive first messages from the first device, and is further configured to power down the second receiver during at least some time periods during which the second device does not expect to receive first messages from the first device; and

wherein the at least one first controller is configured to cause the first transmitter to transmit at least some of the first messages from the first device to the second device during the identified time periods during which the second device expects to receive first messages from the first device.

67. (New) The system of claim 28, wherein both the first and second devices are battery operated and configured to be carried by a person when the system is operational.

68. (New) The method of claim 33, wherein the step (a3) comprises powering down the receiver included in the second device during at least some time periods during which the second device does not expect to receive first messages from the first device.

69. (New) The method of claim 68, wherein the time periods during which the second device does not expect receive first messages from the first device are identified based upon information included in at least some of the first messages communicated from the first device to the second device, which information indicates when the first device expects to send at least one subsequent first message to the second device.

70. (New) The method of claim 68, wherein at least some of the second messages communicated from the second device to the first device include information identifying the time periods during which the second device expects to receive first messages from the first device; and wherein the method further comprises a step of:

transmitting at least some of the first messages from the first device to the second device during the identified time periods during which the second device expects to receive first messages from the first device.

71. (New) The method of claim 33, wherein both the first and second devices are battery operated and ambulatory, and wherein the method further comprises a step of:

performing the steps (a1) – (a3) while both the first and second device are carried by a person.

72. (New) The method of claim 41, further comprising a step of:

(a3) powering down a receiver included in the second device at least occasionally when the second device is operational.

73. (New) The method of claim 72, wherein the step (a3) comprises powering down the receiver included in the second device during at least some time periods during which the second device does not expect to receive first messages from the first device.

74 (New) The method of claim 73, wherein the time periods during which the second device does not expect receive first messages from the first device are identified based upon information included in at least some of the first messages communicated from the first device to the second device, which information indicates when the first device expects to send at least one subsequent first message to the second device.

75. (New) The method of claim 73, wherein at least some of the second messages communicated from the second device to the first device include information identifying the time periods during which the second device expects to receive first messages from the first device; and wherein the method further comprises a step of:

transmitting at least some of the first messages from the first device to the second device during the identified time periods during which the second device expects to receive first messages from the first device.

76. (New) The method of claim 41, wherein both the first and second devices are battery operated and ambulatory, and wherein the method further comprises a step of:

performing the steps (a1) and (a2) while both the first and second device are carried by a person.